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METHOD AND APPARATUS FOR RECORDING ACTUAL TIME USED BY A SERVICE WHICH MAKES REQUESTS FOR DATA

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References Cited

U.S. PATENT DOCUMENTS

D. 378,082	2/1997	Wilson D14/100
4,900,905	2/1990	Pusic 235/381
5,146,491	9/1992	Silver et al 379/114
5,174,056	12/1992	King 40/574
5,393,964	2/1995	Hamilton et al 79/453
5,481,534	1/1996	Beachy et al 379/114
5,504,744	4/1996	Adams et al 370/60.1
5,602,905	2/1997	Mettke 379/96
5,710,807	1/1998	Smith 379/114
5,710,918	1/1998	Lagarde et al 395/610
5,729,594	3/1998	Klingman 379/93.12
5,761,071	6/1998	Bernstein et al 364/479.07
5,812,765	9/1998	Curtis 395/200.3
5,822,215	10/1998	Hohmann et al 364/479.01
5,845,267	12/1998	Ronen 379/114
5,875,110	2/1999	Jacobs 364/479.02
5,881,141	3/1999	Park 379/155
5,920,613	7/1999	Alcott et al 379/114

OTHER PUBLICATIONS

King Products Website Plynth Product Brochure, http:// www.kingproducts.com/miko/plynth/plynth.html, pp. 1/4 to 4/4, as of Dec. 15, 1997.

King Products Website Sidelight Product Brochure http:// www.kingproducts.com/miko/sidelight.html, pp. 1/4 to 4/4, as of Dec. 15, 1997.

King Products Website Technical Note http://www.kingproducts.com/miko/technology/Tech.html#platforms, pp. 1/5 to 5/5, as of Dec. 15, 1997.

Absolu Technologies Payphone Product at website http:// www/absolu.qc.ca/english/m2p2_tec.html, p. 1/1, as of Dec. 15, 1997.

Atcom Inc. Payphone Cyberbooth Unit Product Brochure at website http://ww.atcominfo.com/compactpics.html, p. 1/1, as of Dec. 15, 1997.

Atcom Inc. Compact Cyberbooth Unit Product Brochure at website http://ww.atcominfo.com/cptcybpr.html, p. 1/1, as of Dec. 15, 1997.

Atcom Inc. Cyberbooth Kiosk Unit Product Brochure at website http://ww.atcominfo.com/kioskpics.html, p. 1/1, as of Dec. 15, 1997.

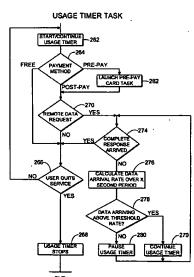
Atcom Inc. Cyberbooth Wall Unit Product Brochure at website http://ww.atcominfo.com/wallpics.html, p. 1/1, as of De., 15, 1997.

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ABSTRACT

An apparatus and method for recording actual time used by a service which makes requests for data. The apparatus includes a first timer for recording time during which the service is in operation and a second timer rendered operable when the service requests data. The second timer is operable to disable the first timer to suspend the recording of the time when the second timer acquires a value exceeding a predefined value, representing the time during which the service is waiting for data in response to a request for data and the second timer re-enables the first timer when the data is received.

28 Claims, 17 Drawing Sheets



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